Education in Chemistry - Index 1987

Subject

Acetone production, 67(C)
Acid precipitation, chemistry of, 141
Acid rain, project, 166
ACOL, 3(C)
Active elements (play), 99(C)
Aerobic evolution, 40
Alzheimer's disease, 68(C)
Anadin, analysis by NMR, 176
Armstrong, H. E., 165
Arrhenius, S.A., 168
ASE meeting, Cardiff, 34(C)
Assessment of practical, 114
Attitudes to chemistry, 108

Benzene, Kekulé structure of, 101(C)
BET equation, 106
Birds eggs, blue pigment, 133(S)
Bonding, Lewis theory of, 81
Book reviews
  A-level, 25
  A-level practical assessment, 155
  Analytical chemistry, 89
  Chemical bond, 25
  Chemical industry, 59
  Chemical principles, 60
  Chemistry games, 60
  Chemistry problems and how to solve them, 26
  Electronics for scientists, 90
  Environmental chemistry, 91, 125
  Fundamental forces, 94
  GCSE, 124, 125
  General chemistry, 90
  Girls and science, 25, 157
  Group theory, 124
  Heterogeneous catalysis, 156
  Inorganic chemistry, 90
  Integrated science, 125, 126
  Laboratories, teaching in, 155
  Laboratory exercises and demonstrations, 59
  Microcomputer applications, 124
  Modular secondary science, 157
  Molecular electromagnetism, 60
  Molecular spectroscopy, 94
  Mossbauer spectroscopy, 93
  NMR spectroscopy, 93
  Nuclear power, 155
  Orbitals, terms and states, 92
  Organic chemistry, 89, 157
  Organic laboratory, microscale, 94
  Organic mechanisms, 91
  Organic photochemistry, 93
  Organic structures from spectra, 91
  Organometallic chemistry, 91
  Petrochemicals, 26
  Physical chemistry, 26, 89, 126
  Problems of chemistry, 60
  Public understanding of science, 92
  Quantum universe, 156
  Safety, 125, 156, 157
  Science critic, 92
  Science in the locality, 156
  Science watch, 157
  Spectroscopy, 89, 91
  Structure and symmetry, 94
  Study aids, 156
Borodin, Aleksandr Porfir'evich, 138
British Association meeting at Belfast, 162
Business/management component, 112

Carbonated water, 71
Chem Ed '87, 163(C)
Chemical flux, 173
Chemical industry, 68(C)
Chemistry in daily life, 135
Chemistry teaching 1870, 54
Chernobyl, 37(C), 67(C)
Chiral compounds, 110
Chloro-molybdenum complexes, 145
City Technical Colleges, 3(C), 34(C)
Cobaloximes, 77
Coenzyme B_{12} analogues, 77
Computer aided configuration assignment, 110
Conkers, 67(C)
Content *vs* process, 32
Coordinated science, 66(C)
Crith, 101(C)
Critical mindedness, 75
Curriculum change, rate of, 147

Demonstrating visible spectrophotometry, 181
Dichloroethene, IR spectrum, 87
Egg races, 35(C)
Electrochemistry demonstrations, 46
Electron pair repulsion theory, microcomputer aid, 24
Environmental chemistry projects, 16
European Year of the Environment, 100(C), 131(C)

Film and Video appraisals, 90
Fluids, non-Newtonian, 70(S)
Frankland, E., 56

Graphs, common malpractices, 14

Hildebrand, Joel, 18
Hill, Graham, interview, 130(C)
Hückel molecular orbital calculations on a micro, 178

Ice analysis, 166
Ink, 6(S), 39(S)
Insulator breakdown, 45
Interactive learning, 75
IR spectra of dichloroethene, 87
IR spectroscopy, microcomputer simulation, 23

Jewellery, 134(L)

Ketones, reduction to hydrocarbons, 49
Kinetics, chemical flux in, 173

Lake Nyos, 67(C)
Lewis structures, 81

Microbial evolution, 40
Microcomputer aid to electron pair repulsion theory, 24
Microcomputer aided molecular orbital calculations, 178
Microcomputer aided stereo-isomerism, 83
Microcomputer aided surface chemistry, 106
Microcomputer controlled potentiostat, 52
Microcomputer simulation of IR spectroscopy, 23
Microcomputers and chemistry, 2(C)
Microcomputers in the lab, 38(L)
Microwave ovens in laboratory, 13
Multiple choice questions, 11
Multiple choice tests, 5(L)
Museum galleries, 37(C)

National curriculum, 163
NERIS, 66(C)
NMR analysis of Anadin, 176

OCEA, 114
Open University TV guide, 30
Organosilicon chemistry, 7
Ostwald, W., 168
Oxford entry procedures, 160

Periodic table, 153, 171
Phase rule, 51
Physical chemistry, centenary, 168
Polarisation curves, microcomputer aided, 52
Polytechnic funding, 98(C)
Potty putty, 70(S)
Priestley, Joseph, 71
Problem-oriented teaching, 43
Protactinium species, 133(S)

Quartz, synthetic, 20
Question sequence, 11

Reactions, student difficulties, 117
Relevance of chemistry, 108
Resources database, 66(C)
Royal Society, 66(C)
RSC meeting, Nottingham, 164(C)
RSC Congress, Swansea, 98(C)

Science in the real world, 20, 45
Science on TV, 37(C)
Sciences: double award, 132(C)
SIFT, 57, 121, 184
Silicones, 7
Software reviews
  Chemdata, 61
  Chemical calculations, 27
  Chemical collisions, 27
  Molecular behaviour, 27
  Organic chemistry, 27
  Overture abstracts, 61
  Periodic properties, 61
  Redox, 27
  Water, working with, 27
Sonochemistry, 102
SORC, 110
Spectrophotometry, visible, 181
Stereoisomerism, 83
Stoichiometric coefficients, 150
Stoichiometry, 73
Student errors in pH, 134(L)
Student errors in stoichiometry, 73
Surface chemistry, 106

T-shirt competition, 69(C)
Teacher supply, 2(C), 64
Thermodynamics, 5(L)
Thermodynamics, chartist approach, 85
Titration calculations, 38(L)

Ultrasound in chemistry, 102

Van't Hoff, J. H., 168
VSEPR theory, 21

Women in science, 39(L)

Ytterby, 6(L)

Key

C—Column
L—Letters to the editor
S—In Search of Solutions

Authors

Ball, D. F., 122
Baugh, M., 40
Ben-Zvi, R., 117
Bickerton, J. C., 176
Blandamer, M. J., 85
Bleasdale, C., 49
Boulton, A., 52
Brown, J. M., 160
Brown, R., 46
Brown, T. M., 77
Bullock, C., 83
Burgess, J., 85
Byrne, M. S., 75

Cardoso, A. C., 51
Chenley, R. B., 147
Cooksey, C. J., 77
Cousins, B. G., 13
Cox, P. J., 110

Eglinton, G., 181
Ercolani, G., 178
Eylon, B-S., 117

Ferriman, B., 114
Festa, R. R., 18
Frazer, M. J., 73, 108

Gil, V.M.S., 51
Gill, J. P., 181
Gold, V., 173
Golding, B. T., 49
Gorfien, M. H., 18

Hadfield, J. M., 43
Hodson, D., 11
Holdsworth, D., 23
Huffer, J., 24
Hunt, C. B., 7

Jenkins, E., 32
Johnstone, A. H., 75

Kauffman, G. B., 138, 168

Le Vent, S., 14, 150
Leharne, S., 141
Lock, R., 114
Lorimer, J. P., 176

Maillet, J-Y., 13
Mason, T. J., 102, 176
Mencarelli, P., 178
Monaghan, P. K., 153
Morgan, D. R., 135
Mortimer, C., 46

Nelson, P. G., 171

Owen, J., 166

Sanderson, P. L., 16
Searle, G. H., 145
Servant, D. M., 73
Shotts, P., 108
Silberstein, J., 117
Smith, F. E., 13
Smith, J. G., 87
Snadden, R. B., 81
Solov'ev, Y. I., 138
Spalding, T. R., 21
Spraget, H. W. G., 52
Steinberg, C., 138
Steventon, P., 24

Thomas, N. C., 71
Tomkins, B., 145
Tomlinson, W. J., 52
Turner, A. B., 110
Turner, I., 54, 64

Van Praagh, G., 20, 45
Vowles, R. S., 24

Wood, J. A., 106

Education in Chemistry - Index 1987

Subject

Acetone production, 67(C)
Acid precipitation, chemistry of, 141
Acid rain, project, 166
ACOL, 3(C)
Active elements (play), 99(C)
Aerobic evolution, 40
Alzheimer's disease, 68(C)
Anadin, analysis by NMR, 176
Armstrong, H. E., 165
Arrhenius, S.A., 168
ASE meeting, Cardiff, 34(C)
Assessment of practical, 114
Attitudes to chemistry, 108

Benzene, Kekulé structure of, 101(C)
BET equation, 106
Birds eggs, blue pigment, 133(S)
Bonding, Lewis theory of, 81
Book reviews
  A-level, 25
  A-level practical assessment, 155
  Analytical chemistry, 89
  Chemical bond, 25
  Chemical industry, 59
  Chemical principles, 60
  Chemistry games, 60
  Chemistry problems and how to solve them, 26
  Electronics for scientists, 90
  Environmental chemistry, 91, 125
  Fundamental forces, 94
  GCSE, 124, 125
  General chemistry, 90
  Girls and science, 25, 157
  Group theory, 124
  Heterogeneous catalysis, 156
  Inorganic chemistry, 90
  Integrated science, 125, 126
  Laboratories, teaching in, 155
  Laboratory exercises and demonstrations, 59
  Microcomputer applications, 124
  Modular secondary science, 157
  Molecular electromagnetism, 60
  Molecular spectroscopy, 94
  Mossbauer spectroscopy, 93
  NMR spectroscopy, 93
  Nuclear power, 155
  Orbitals, terms and states, 92
  Organic chemistry, 89, 157
  Organic laboratory, microscale, 94
  Organic mechanisms, 91
  Organic photochemistry, 93
  Organic structures from spectra, 91
  Organometallic chemistry, 91
  Petrochemicals, 26
  Physical chemistry, 26, 89, 126
  Problems of chemistry, 60
  Public understanding of science, 92
  Quantum universe, 156
  Safety, 125, 156, 157
  Science critic, 92
  Science in the locality, 156
  Science watch, 157
  Spectroscopy, 89, 91
  Structure and symmetry, 94
  Study aids, 156
Borodin, Aleksandr Porfir'evich, 138
British Association meeting at Belfast, 162
Business/management component, 112

Carbonated water, 71
Chem Ed '87, 163(C)
Chemical flux, 173
Chemical industry, 68(C)
Chemistry in daily life, 135
Chemistry teaching 1870, 54
Chernobyl, 37(C), 67(C)
Chiral compounds, 110
Chloro-molybdenum complexes, 145
City Technical Colleges, 3(C), 34(C)
Cobaloximes, 77
Coenzyme B_{12} analogues, 77
Computer aided configuration assignment, 110
Conkers, 67(C)
Content *vs* process, 32
Coordinated science, 66(C)
Crith, 101(C)
Critical mindedness, 75
Curriculum change, rate of, 147

Demonstrating visible spectrophotometry, 181
Dichloroethene, IR spectrum, 87
Egg races, 35(C)
Electrochemistry demonstrations, 46
Electron pair repulsion theory, microcomputer aid, 24
Environmental chemistry projects, 16
European Year of the Environment, 100(C), 131(C)

Film and Video appraisals, 90
Fluids, non-Newtonian, 70(S)
Frankland, E., 56

Graphs, common malpractices, 14

Hildebrand, Joel, 18
Hill, Graham, interview, 130(C)
Hückel molecular orbital calculations on a micro, 178

Ice analysis, 166
Ink, 6(S), 39(S)
Insulator breakdown, 45
Interactive learning, 75
IR spectra of dichloroethene, 87
IR spectroscopy, microcomputer simulation, 23

Jewellery, 134(L)

Ketones, reduction to hydrocarbons, 49
Kinetics, chemical flux in, 173

Lake Nyos, 67(C)
Lewis structures, 81

Microbial evolution, 40
Microcomputer aid to electron pair repulsion theory, 24
Microcomputer aided molecular orbital calculations, 178
Microcomputer aided stereo-isomerism, 83
Microcomputer aided surface chemistry, 106
Microcomputer controlled potentiostat, 52
Microcomputer simulation of IR spectroscopy, 23
Microcomputers and chemistry, 2(C)
Microcomputers in the lab, 38(L)
Microwave ovens in laboratory, 13
Multiple choice questions, 11
Multiple choice tests, 5(L)
Museum galleries, 37(C)

National curriculum, 163
NERIS, 66(C)
NMR analysis of Anadin, 176

OCEA, 114
Open University TV guide, 30
Organosilicon chemistry, 7
Ostwald, W., 168
Oxford entry procedures, 160

Periodic table, 153, 171
Phase rule, 51
Physical chemistry, centenary, 168
Polarisation curves, microcomputer aided, 52
Polytechnic funding, 98(C)
Potty putty, 70(S)
Priestley, Joseph, 71
Problem-oriented teaching, 43
Protactinium species, 133(S)

Quartz, synthetic, 20
Question sequence, 11

Reactions, student difficulties, 117
Relevance of chemistry, 108
Resources database, 66(C)
Royal Society, 66(C)
RSC meeting, Nottingham, 164(C)
RSC Congress, Swansea, 98(C)

Science in the real world, 20, 45
Science on TV, 37(C)
Sciences: double award, 132(C)
SIFT, 57, 121, 184
Silicones, 7
Software reviews
  Chemdata, 61
  Chemical calculations, 27
  Chemical collisions, 27
  Molecular behaviour, 27
  Organic chemistry, 27
  Overture abstracts, 61
  Periodic properties, 61
  Redox, 27
  Water, working with, 27
Sonochemistry, 102
SORC, 110
Spectrophotometry, visible, 181
Stereoisomerism, 83
Stoichiometric coefficients, 150
Stoichiometry, 73
Student errors in pH, 134(L)
Student errors in stoichiometry, 73
Surface chemistry, 106

T-shirt competition, 69(C)
Teacher supply, 2(C), 64
Thermodynamics, 5(L)
Thermodynamics, chartist approach, 85
Titration calculations, 38(L)

Ultrasound in chemistry, 102

Van't Hoff, J. H., 168
VSEPR theory, 21

Women in science, 39(L)

Ytterby, 6(L)

Key

C—Column
L—Letters to the editor
S—In Search of Solutions

Authors

Ball, D. F., 122
Baugh, M., 40
Ben-Zvi, R., 117
Bickerton, J. C., 176
Blandamer, M. J., 85
Bleasdale, C., 49
Boulton, A., 52
Brown, J. M., 160
Brown, R., 46
Brown, T. M., 77
Bullock, C., 83
Burgess, J., 85
Byrne, M. S., 75

Cardoso, A. C., 51
Chenley, R. B., 147
Cooksey, C. J., 77
Cousins, B. G., 13
Cox, P. J., 110

Eglinton, G., 181
Ercolani, G., 178
Eylon, B-S., 117

Ferriman, B., 114
Festa, R. R., 18
Frazer, M. J., 73, 108

Gil, V.M.S., 51
Gill, J. P., 181
Gold, V., 173
Golding, B. T., 49
Gorfien, M. H., 18

Hadfield, J. M., 43
Hodson, D., 11
Holdsworth, D., 23
Huffer, J., 24
Hunt, C. B., 7

Jenkins, E., 32
Johnstone, A. H., 75

Kauffman, G. B., 138, 168

Le Vent, S., 14, 150
Leharne, S., 141
Lock, R., 114
Lorimer, J. P., 176

Maillet, J-Y., 13
Mason, T. J., 102, 176
Mencarelli, P., 178
Monaghan, P. K., 153
Morgan, D. R., 135
Mortimer, C., 46

Nelson, P. G., 171

Owen, J., 166

Sanderson, P. L., 16
Searle, G. H., 145
Servant, D. M., 73
Shotts, P., 108
Silberstein, J., 117
Smith, F. E., 13
Smith, J. G., 87
Snadden, R. B., 81
Solov'ev, Y. I., 138
Spalding, T. R., 21
Spraget, H. W. G., 52
Steinberg, C., 138
Steventon, P., 24

Thomas, N. C., 71
Tomkins, B., 145
Tomlinson, W. J., 52
Turner, A. B., 110
Turner, I., 54, 64

Van Praagh, G., 20, 45
Vowles, R. S., 24

Wood, J. A., 106